

Tracking number	Milestone	Target Date	Date Completed	1st quarter	2nd quarter	3rd quarter	4th quarter	Lead
MINIMUM SUSTAINABLE PROGRAM								
Aquatic Vegetation Component								
2006A1	Complete data entry and QA/QC of 2005 data; 1250 observations.							Popp, Dukerschein, Kirby, Sauer, Hansen
	a. Data entry completed and submission of data to USGS	1-Oct-05	✓ 7-Sep-05	Completed				Popp, Dukerschein, Kirby
	b. Data loaded on level 2 browsers	10-Oct-05	✓ 30-Sep-05	Completed				Hansen
	c. QA/QC scripts run and data corrections sent to Field Stations	30-Oct-05	✓ 13-Oct-05	Completed				Sauer
	d. Field Station QA/QC with corrections to USGS	15-Nov-05	✓ 21-Oct-05	Completed				Popp, Dukerschein, Kirby
	e. Corrections made and data moved to public Web Browser	30-Nov-05	✓ 7-Nov-05	Completed				Sauer, Hansen, Caucutt
2006A2	WEB-based annual Aquatic Vegetation Component Update with 2005 data on Public Web Server.							Popp, Dukerschein, Kirby, Sauer, Heglund
	a. Develop first draft	15-Feb-06	✓ 25-Jan-06		Completed			Sauer
	b. Reviews completed	28-Feb-06	✓ 21-Apr-06	Difficulty getting reviewers	Completed			Popp, Dukerschein, Kirby, Sauer, Heglund, Yin, Cox
	c. Submit final update	31-Mar-06	✓ 22-May-06	Software malfunction	Completed			Sauer, Heglund
	d. Placement on Web	30-Jul-06						Sauer, Caucutt, Cox
2006A3	Complete aquatic vegetation sampling for Pools 4, 8, and 13 (Table 1)	31-Aug-06						Popp, Dukerschein, Kirby
2006A4	Address review comments and submit draft manuscript: Evaluation of Aquatic Macrophyte Community Response to Island Construction in the UMR	30-Jan-06	✓ 15-Feb-06		Completed and submitted to Lake and Reservoir Management			Dukerschein, Yin, Gray, Heglund
2006A5	Contract report: nonresponse, frame and measurement errors	30-Aug-06						Rogala, Gray
2006A6	Submit progress report on enhancement of analysis on backwater effects on chlorophyll <i>a</i>	30-Aug-06						Rogala
2006A7	Guidance to the UMESC-LTRMP management team on scientific review of the vegetation component	30-Aug-06						Heglund, Yin
2005GLIDE3 ²	Submit LTRMP draft report: Establish baseline of SAV distribution and index of abundance	31-Jan-06	✓ 3-Mar-06		Completed-- Reviews sent to author 12 April			Chick, O'Hara
2005GLIDE4 ²	Submit LTRMP final draft report: Establish baseline of SAV distribution and index of abundance	30-Sep-06						Chick, O'Hara, Heglund, Gray

Tracking number	Milestone	Target Date	Date Completed	1st quarter	2nd quarter	3rd quarter	4th quarter	Lead
Fisheries Component								
2006B1	Complete data entry, QA/QC of 2005 fish data; ~1,590 observations							Sauer, Popp, Dukerschein, Kirby, Chick, O'Hara, Hrabik, Hansen
	a. Data entry completed and submission of data to USGS	31-Jan-06	✓ 8-Feb-06		Completed			Popp, Dukerschein, Kirby, Chick, O'Hara, Hrabik
	b. Data loaded on level 2 browsers; QA/QC scripts run and data corrections sent to Field Stations	10-Feb-06	✓ 14-Feb-06		Completed			Sauer, Hansen
	c. Field Station QA/QC with corrections to USGS	1-Mar-06	✓ 6-Mar-06		Completed			Popp, Dukerschein, Kirby, Chick, O'Hara, Hrabik
	d. Corrections made and data moved to public Web Browser	15-Mar-06	✓ 8-Mar-06		Completed			Sauer, Hansen, Caucutt
2006B2	WEB-based annual Fisheries Component Update with 2005 data on Public Web Server.							Sauer, Popp, Dukerschein, Kirby, Chick, O'Hara, Hrabik, Johnson
	a. Develop first draft	30-Apr-06						Sauer, Popp, Dukerschein, Kirby, Chick, O'Hara, Hrabik
	b. Reviews completed	15-May-06						Sauer, Popp, Dukerschein, Kirby, Chick, O'Hara, Hrabik, Johnson, Knights, Cox
	c. Submit final update	31-May-06						Sauer, Popp, Dukerschein, Kirby, Chick, O'Hara, Hrabik
	d. Placement on Web	31-Aug-06						Sauer, Caucutt, Cox
2006B3	Complete fisheries sampling for Pools 4, 8, 13, 26, the Open River Reach, and La Grange Pool (Table 1)	31-Oct-06						Popp, Dukerschein, Kirby, Chick, O'Hara, Hrabik
2006B4	Submit draft framework for over-wintering fish as part of the Additional Program Elements proposal process	31-Oct-05	✓ 31-Oct-05	Completed				Ickes

Tracking number	Milestone	Target Date	Date Completed	1st quarter	2nd quarter	3rd quarter	4th quarter	Lead
2006B5	Submit draft manuscript: Standardized CPUE data from multiple gears for community level analysis.	31-Jan-06			Manuscript was submitted to Journal (CFAS). It was rejected, and will be revised and submitted to another journal. Resubmit by 15 June			Chick, Minchin, Ickes, Pegg, Barko, Chick, J.H., P.R. Minchin, B. Ickes, M.A. Pegg, and V.A. Barko.
2006B6	Submit draft manuscript: Spatial structure and temporal variation of fish communities in the Upper Mississippi River.	28-Feb-06			Manuscript delayed until after 2006B5 is revised and resubmitted. 1 Sept.			Chick, Ickes, Pegg, Barko, Hrabik, Herzog, Johnson, Cox
2006B7	Enhancement of the fish graphical browser	30-Sep-06						Dukerschein, Ickes, Sauer
2006B8	Summary report: Habitat-related factors that are potentially limiting backwater fish communities	15-May-06						Dukerschein
2006B9	Summary report: LTRMP-EMAP protocol related inferences	31-Aug-06						Dukerschein
2006B10	Draft MDNR report: Multi-year fish report on Pool 4	30-Sep-06						Popp
2006B11	LTRMP Fish Autecology 10-year Report	30-Apr-06						Kirby, Bowler, Ickes, Johnson, Cox
2006B12	Submit draft manuscript: Catfish analysis	30-Jun-06						Hrabik
2006B13	Submit draft report: Large river darters	1-Aug-06						Hrabik
2005B5 ²	LTRMP report titled: Fish life history database report	31-Aug-06						Dukerschein, Ickes, Johnson, Cox
2005B8 ²	Contract report titled: "Non-native fishes in the Upper Mississippi River System: A Synthesis of Information from the Long Term Resource Monitoring Program" to COE and USGS. (FY04 SOW) Irons et al.	30-May-06			Final edits completed by UMESC, resent to authors 20 April			O'Hara, Popp, Chick, Ickes, Kolar, Hrabik, Johnson
2005B12 ²	Complete and distribute USGS open-file report on fish analysis. (FY02 SOW)	30-Mar-06	✓ 2-Mar-06		Completed-to USGS hub for desktop publishing			Ickes

Tracking number	Milestone	Target Date	Date Completed	1st quarter	2nd quarter	3rd quarter	4th quarter	Lead
2005APE11 ²	Submit final draft LTRMP report: Analysis of fish age structure and growth in the Illinois River	30-Apr-06						O'Hara, Chick, Johnson, Cox
2005APE13 ²	Submit draft OFR: Asian Carp in the Mississippi River	30-Jun-06						Barko
2005APE14 ²	Submit draft manuscript: Asian Carp in the Mississippi River:	30-Sep-06						Barko
Water Quality Component								
2006D1	Complete calendar year 2005 fixed-site water quality sampling	31-Dec-05	✓ 31-Dec-05	Completed				Houser, Popp, Dukerschein, Kirby, Chick, O'Hara, Hrabik
2006D2	Complete laboratory analysis of 2005 fixed site and SRS data; Data loaded to Oracle data base.	30-Mar-06	✓ 3-Mar-06		Completed			Yuan, Hansen
2006D3	Complete data entry, QA/QC of calendar year 2005 fixed-site and SRS data.	30-May-06						Popp, Dukerschein, Kirby, Chick, O'Hara, Hrabik, Hansen
2006D4	Complete fixed site and SRS sampling for Pools 4, 8, 13, 26, Open River, and La Grange Pool (Table 1)	30-Sep-06						Popp, Dukerschein, Kirby, Chick, O'Hara, Hrabik
2006D5	Submit draft manuscript describing results of analyses of spatial and temporal patterns in UMRS WQ.	15-Sep-06						Houser
2006D6	Submit draft contract report: Evaluation of new Hydrolab Turbidity Probe	30-Sep-06						Dukerschein
2006D7	Submit draft report: Lake Pepin zooplankton and water quality data	30-Sep-06						Popp
2006D8	Summary of analysis on effectiveness of wetland creation	30-Jul-06						Kirby
2006D9	Effects of discharge on selected water physical and chemical parameters	1-Aug-06						Hrabik
2005D7 ²	Draft report: Main channel/side channel report for the Open River Reach.	1-Jun-06						Hrabik
2005D9 ²	Water Quality component update on-line	15-Feb-06	✓ 30-Mar-06		Completed: www.umesc.usgs.gov/reports_publications/ltrmp/water.html			Houser, Rogala
2005D10 ²	Water Quality component review	30-Apr-06						Houser, Johnson, Cox

Tracking number	Milestone	Target Date	Date Completed	1st quarter	2nd quarter	3rd quarter	4th quarter	Lead
2005APE24a ²	Submit final draft LTRMP report: retrospective, cross-component analysis for Pool 26	28-Feb-06			Reviews have been recieved and revisions are in progress. Resubmit 1 June			Chick, Johnson
2005APE24b ²	LTRMP report: retrospective, cross-component analysis for Pool 26	30-Sep-06						Chick, Johnson, Cox
2005APE28 ²	Complete Water Quality Fixed Site Graphical Browser	30-Mar-06	✓ 20-Mar-06		Completed			Caucutt, Houser, Rogala
Statistical Evaluation of Monitoring Data								
2006E1	Power to detect change	30-Aug-06						Gray, Heglund, Johnson, Houser, Ickes, Sauer, Rogala
2006E2	Submit draft document describing methods for evaluating power-to-detect trends in prevalence data	15-Sep-06						Gray, Heglund
Data Management								
2006M1	Update vegetation, fisheries, and water quality component field data entry and correction applications.	30-May-06						Hansen
2006M2	Load 2005 component sampling data into Oracle tables and make data available on Level 2 browsers for field stations to QA/QC.	30-Jun-06						Hansen
Land Cover/Land Use								
2005V3 ²	LTRMP report titled: Upper Mississippi River Vegetation Change (1989-2000) (FY03)	30-Dec-05			Due to Admin. Commitments of PI, delayed to 30 June 2006			Lohman
2005APE18 ²	HNA GIS Query Tool compatible with ArcMap 9.0	30-Dec-05	✓ 17-Jan-06		Completed			Fox
Macroinvertebrate Component								
2006C1	LTRMP report titled: "Evaluation of the Long Term Resource Monitoring Program's Macroinvertebrate Component"	28-Feb-06	✓ 23-Jan-06		Completed			Sauer, Johnson, Cox
2005C2 ²	Open River Macroinvertebrate Report (Outstanding product)	15-Aug-06						Hrabik, Johnson

Tracking number	Milestone	Target Date	Date Completed	1st quarter	2nd quarter	3rd quarter	4th quarter	Lead
Annual LTRMP Monitoring Summary Report								
2006S1	2004 annual LTRMP Web-based summary report on-line	30-Mar-06	✓ 3-May-06		Completed			Sauer, Heglund, Johnson, Gaugush, Houser, Ickes, Yin, Caucutt, Cox
2006S2	Draft 2005 annual LTRMP Web-based summary report	30-Sep-06						Gaugush, Houser, Ickes, Yin, Heglund, Johnson
2005S2 ²	Draft Web-based summary report submitted for USGS review (2000 & 2001) (FY02 SOW)	28-Feb-06	✓ 23-Nov-2005 & 01-Dec-2005		Completed			Sauer, Johnson, Heglund, Gaugush, Houser, Ickes, Yin
2005S3 ²	Final draft Web-based summary report completed and submitted to COE (2000 & 2001) (FY02 SOW)	31-May-06						Sauer, Johnson, Heglund, Gaugush, Houser, Ickes, Yin

Tracking number	Milestone	Target Date	Date Completed	1st quarter	2nd quarter	3rd quarter	4th quarter	Lead
ADDITIONAL PROGRAM ELEMENTS								
Development of two-dimensional numerical hydraulic models for Mississippi River Pool 13 and Illinois River La Grange Pool								
2006APE8	Hydrologic models of Pool 13 and La Grange Pool	30-Sep-06						Martens
Testing for a relationship between LTRMP catch-per-unit-effort data and fish abundance estimates from block nets								
2006APE11	Permits for application of chemicals	30-Sep-06						Chick
Variation in chlorophyll a and inorganic suspended solids in backwater lakes of the Upper Mississippi River								
2006APE13	Submit draft manuscript on Chlorophyll <i>a</i> and inorganic suspended solids in backwater lakes of the UMRS	30-Aug-06						Gray
Vegetation, primary production, and dissolved oxygen dynamics in UMRS backwater lakes								
2006APE15a	Field data collection completed	30-Sep-06						Houser
2006APE15b	Database	30-Sep-06						Houser
Investigate effects of newly completed HREPs (Lake Chautauqua NWR, Banner Marsh State Fish and Wildlife Area) in La Grange Pool								
2006APE17a	Draft LTRMP Technical Report	30-Jun-06						Chick, O'Hara
2006APE17b	Submit final draft report	30-Sep-06						Chick, O'Hara
Developing Indicators of Southern Bottomland Hardwood Forest Condition within the Upper Mississippi River Ecosystem								
2006APE21	Submit LTRMP draft report	30-Sep-06						Battaglia
LTRMP water quality graphical browser for stratified random sampling sites								
2006APE27	Graphical water browser for LTRMP Water Quality SRS sites on-line	1-Sep-06						Caucutt
Next generation forest on the UMR floodplain								
2006APE29	Field data collection	30-Sep-06						Heglund, Yin
Aquatic Vegetation and Water Quality Response to a Second Year of Water Level Drawdown in Navigation Pool 5 of the UMR								
2006APE30a	Aerial photos taken	31-Aug-06						Popp
2006APE30b	Vegetation and water quality sampling completed	30-Sep-06						Popp
Identifying potential controls on abundance and size structure of centrarchids and diversity of fishes in off-channel areas in the UMR								
2006APE34	Draft contract report	1-Sep-06						Knights
Importance of the UMR Forest Corridor to Neotropical Migratory Birds								
2006APE42a	Ground surveys on Upper Mississippi River and Mark Twain and Illinois River Refuges. Monitor migration with radar.	30-Jun-06						Kirsch
2006APE42b	Draft contract report on protocol	30-Sep-06						Kirsch
2006APE42c	Submit summary report	30-Sep-06						Kirsch
Assessment of the Rake Method for the Estimation of Submersed Aquatic Vegetation Levels								
2006APE43	Submit draft report	30-Aug-06						Deppa, Heglund
Identification of Hydraulic Characteristics of Habitats Selected by Riverine Fishes								
2006APE49	Database completion	30-Sep-06						Gutreuter
Development of a floodplain forest restoration database for the UMRS: a tool for future coordinated forest management planning								
2006APE51	Submit summary report	30-Sep-06						Kirsch

Tracking number	Milestone	Target Date	Date Completed	1st quarter	2nd quarter	3rd quarter	4th quarter	Lead
Status and trends of waterbirds on the Upper Mississippi River								
2006APE52a	Completion of database	31-Jul-06						Meier
2006APE52b	Submit draft summary report	30-Sep-06						Meier
Data Visualization Tools								
2006Tools1	Maintenance of graphical fish browser. Update annual sampling tables.	30-Sep-06						Schlifer, (Under MSP: Sauer, Caucutt)
2006Tools2	Enhancement of the graphical fish browser.	30-Sep-06						Schlifer, (Under MSP: Dukerschein, Ickes, Sauer, Caucutt)
2006Tools3	Maintenance of graphical vegetation browser. Update annual sampling tables.	30-Sep-06	✓ 14-Feb-06				Completed	Schlifer, (Under MSP: Sauer, Caucutt)
2006Tools4	Complete Water Quality Fixed Site Graphical Browser (Pools 8, 13, and Open River in review)	30-Mar-06	✓ 5-May-06		Completed: www.umesc.usgs.gov/data_library/water_quality/wq_browser.html			Schlifer, Kratt, Caucutt (Under MSP: Houser, Rogala)
2006Tools5	Complete Water Quality Fixed Site Graphical Browser (Pools 4, 26 and La Grange)	30-Mar-06	✓ 5-May-06		Completed: www.umesc.usgs.gov/data_library/water_quality/wq_browser.html			Schlifer, Kratt, Caucutt (Under MSP: Houser, Rogala)
2006Tools6	Maintenance of Land Cover Viewer ArcIMS server	30-Sep-06						Nelson
Status and Trends Report								
2006S&T1a	Draft report available for technical review (30 day review period)	1-Mar-06			New dealines May 12 and June 16			Hubbell, Gaugush
2006S&T1b	Final draft report submitted for editorial review	1-May-06						Gaugush, Hubbell
2006S&T1c	Report printed and distributed	TBD						Gaugush, Hubbell
Bathymetry								
2006BATHa	LTRMP Bathymetry coordinator will send maps of LTRMP bathymetry data gaps to all 3 Corps district contacts, available as shape files	31-Jan-06			Completed			Hubbell, Rogala
2006BATHb	The districts will provide an estimate of their capability, i.e. the number of survey days to be completed with the funding, to POC (cc M. Hubbell)	14-Feb-06			Completed			Hubbell, Rogala
2006BATHc	Anticipated Schedule from each District POC to primary POC (cc M. Hubbell)	1-Mar-06			Completed			Hubbell, Rogala

Tracking number	Milestone	Target Date	Date Completed	1st quarter	2nd quarter	3rd quarter	4th quarter	Lead
2006BATHd	FINAL DATA CALL to primary POC	30-Sep-06						Hubbell, Rogala
2006BATHe	Brief (~1 page) summary report (where, what, how, when, \$) (J. Rogala and 3 District POCs) to J. Sauer (cc M. Hubbell)	30-Sep-06						Hubbell, Rogala